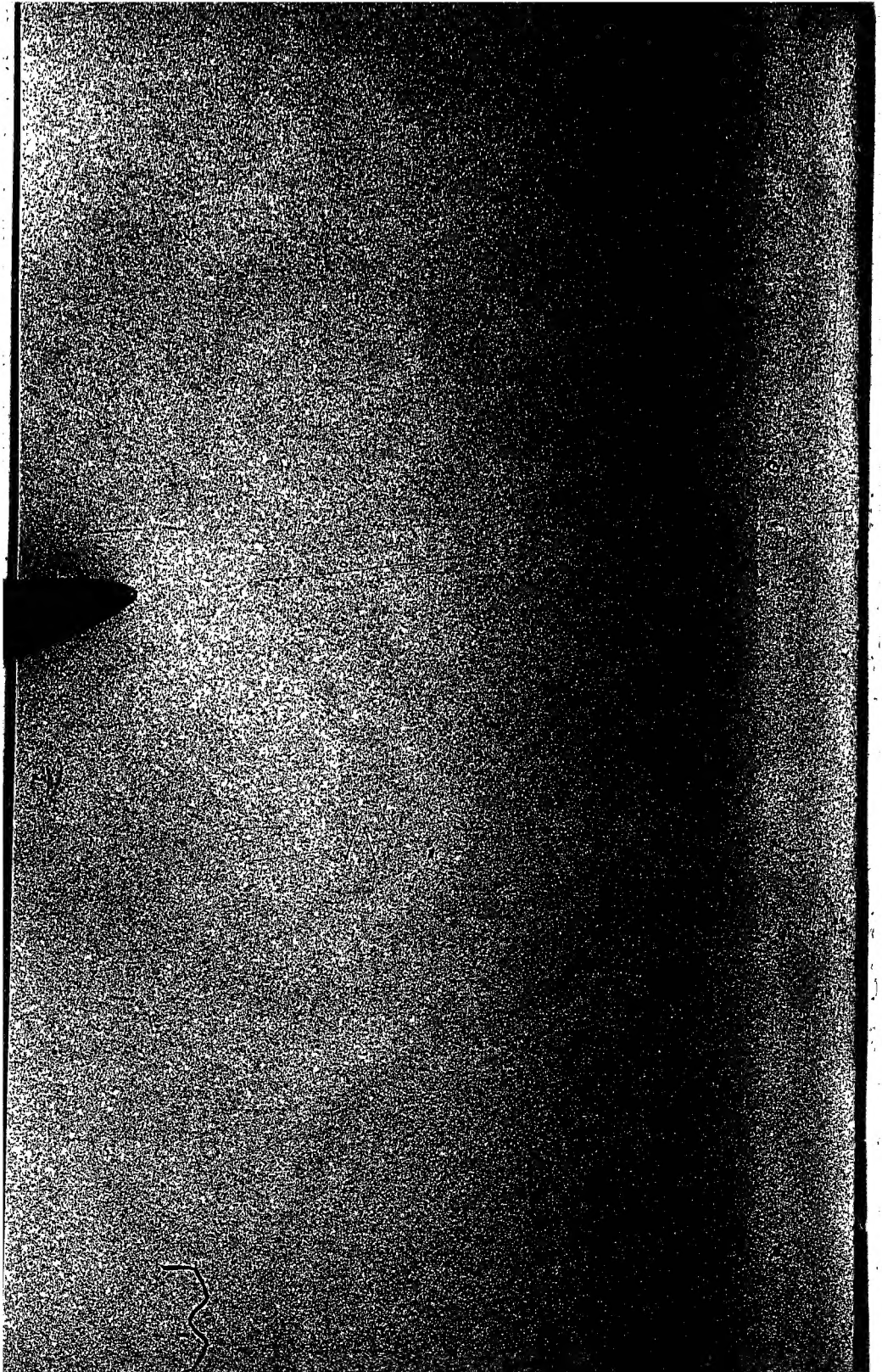




The WINNIPEG
GRAIN
EXCHANGE

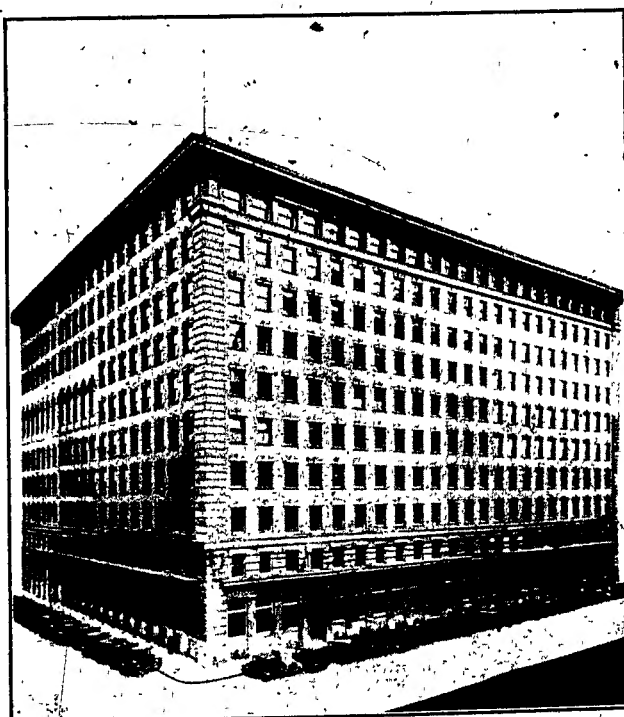
1887

- 1934



The Winnipeg Grain Exchange

FOUNDED 1887—REORGANIZED 1908



GRAIN EXCHANGE BUILDING
+ LOMBARD STREET, WINNIPEG,
MANITOBA

THE WORLD'S LARGEST
CASH GRAIN MARKET

from

Farm to Seaboard

MARKETING CANADA'S GRAIN

Functions of the Winnipeg Grain Exchange, the Clearing House, Lake Shipper's Clearance Association, and the Agencies of Inspection and Transportation Described



ORIGINAL MEMBERS OF THE WINNIPEG GRAIN EXCHANGE

THE Winnipeg Grain Exchange is a market place where the buyers and sellers of grain meet to transact their business and where arrangements are made to place Canadian grain and its products into the consuming markets of the world as rapidly as possible and with the minimum of cost to all concerned.

That is its function and that is its achievement. Beyond that the Exchange does not go. It does not itself engage in trading, but it supplies the facilities and organization by which its members move Canada's grain from the farm lands of the West to the four corners of the world.

Its members represent every division of the grain business from the grower to the consumer—elevator operators, commission merchants, brokers, shippers, vessel brokers, millers. Many of these members are residents of Great Britain, European countries and the United States. The members resident in Winnipeg number about 360 and these gather daily on the trading floor of the Winnipeg Grain Exchange to speed the distribution of the crop.

Exchange is Fifty Years Old

Fifty years ago there was no Grain Exchange here. Today it is the home of the world's largest primary wheat market. Its beginnings were small. In 1883, a group of Winnipeg men saw that the wheat production of Manitoba was growing larger than the needs of home consumption. They realized that increasing wheat yields made imperative the establishment of a place where dealers and millers could meet for the transaction of their business. But it was not until 1887 that their efforts to form an organization of traders in grain and provisions were successful and the Winnipeg Grain and Produce Exchange was born. The late Sir Daniel McMillan was the first president, G. F. Galt was vice-president and C. N. Bell secretary. The membership fee was set at \$15.00.

Vast Increase in West's Wealth

In his presidential address at the first annual meeting of the Exchange on Feb. 9, 1889, Sir Daniel estimated that the year's business in grain had reached a total of \$6,500,000, a big sum in those days but only a hint of the agricultural wealth that was to be built up in Western Canada. Today, the prairie wheat crop reaches annual values of upwards of half a billion dollars.

The first business of the exchange was conducted in a basement room in the City Hall and there were 100 members. Today it is housed in one of Canada's largest office buildings and the membership numbers 463.

In 1891 the Grain and Produce Exchange was incorporated. In 1892 it moved into a new building on Market Street, built by Nicholas Bawlf. Growth was steady from then on and in 1908 the need was seen for reorganization. The changes then made produced the Winnipeg Grain Exchange as it is today—a voluntary, non-incorporated association, a self-governing institution founded upon the consent and integrity of its members and based upon a mutual contract contained in its constitution.

A Great Forward Step

Possibly the greatest forward step was that taken by the Exchange in 1901 when it was still the original Grain and Produce Exchange. In that year the grain futures market and clearing house was established, making possible the development of the present market which is on a scale undreamed of by those who more than thirty years ago inaugurated the system.

In 1908, the Exchange again found larger quarters necessary and moved into the present Grain Exchange Building, constructed by the Traders' Building Association.

The growth of the Winnipeg Exchange has kept pace with the growth of the West. It has become an international grain market of first importance; it is in constant touch by wire, cable and telephone with the grain centres of the world. The radio plays an important part in broadcasting essential market information.

Two excerpts from the Grain Exchange constitution clearly define its objects:

(a) To compile, record and publish, and acquire and distribute information respecting the grain, produce and provision trades, and promote the establishment and maintenance of uniformity in the business customs and regulations among the persons engaged in the said trades, to inaugurate just and equitable principles in trade and generally to secure to its members the benefits of legitimate co-operation in the furtherance of their business and pursuits.

(b) To organize and establish and maintain an association, not for pecuniary profit or gain; but for the purpose of promoting objects and measures for the advancement of trade and commerce respecting the grain, produce and provision trades for the general benefit of the Dominion of Canada as herein provided; to acquire, lease or provide and regulate a suitable room and place for a Grain and Produce Exchange and offices in the City of Winnipeg; to facilitate the buying and the selling of the products in such trades; to promote and protect all interests concerned in the purchase, sale and handling of the grain, produce and provision trades; to inspire confidence and stability in the methods and workings and integrity of its members; to provide facilities for the prompt and economic dispatch of business; to avoid and amicably adjust, settle and determine controversies and misunderstandings between persons engaged in the said trades, or which may be submitted to arbitration as hereinafter provided; to all of which ends the said association is hereby empowered by vote of its members at any annual, general or special meeting of the association, to make all proper, needful by-laws, rules and regulations for its government, and administration of the affairs generally of the said association, provided always such by-laws are not contrary to law, and further, to amend and repeal such by-laws, rules and regulations.

All of which means, in brief, that the Winnipeg Grain Exchange members have bound themselves to co-operate to market Canada's great grain crops as economically as possible and to the best advantage of the country. The Grain Exchange is no closed corporation. Any bona fide trader or dealer in grain may become a member.

How Grain Trading is Conducted

The business of trading in grain is unique in its operation. Its very nature requires a system and facilities unlike any other commercial undertaking. A visit to the trading room immediately reveals this. The distinctive physical features are the wheat and coarse grain "pits," the blackboards where prices at Winnipeg and the world's markets are posted, the weather bulletin boards, the rows of telephone booths and the batteries of telegraph instruments linking Winnipeg with the other grain centres. Across one end of the high-ceilinged room runs the visitors' gallery.

Looking down upon the pits where the traders congregate, one wonders how business can be done in such a seemingly hectic atmosphere. Shouting traders gesticulate at each other and mill ceaselessly about upon the circular steps of the "pits." But each shout and wave of hand is a definite part of a highly specialized system, a bid made or an offer accepted, dictated by world conditions, regulated by the law of supply and demand. Prices are not fixed by these transactions; they are registered, reflecting accurately and instantly the presence of world supply and demand.



TRADING FLOOR OF THE WINNIPEG GRAIN EXCHANGE

The Futures Market

The "futures" market, where contracts are made for the delivery of grain at some future date, is of paramount importance in the distribution of Canada's grain into the consumptive channels of the world, and of this much misunderstood phase of the grain trade the Royal Commission presided over by Sir Josiah Stamp, noted English economist, had the following to say in its report on trading in grain futures:

"In addition to the benefits reflected to the producer in furnishing a system of insurance for the handling of his grain, and in providing an ever-ready and convenient means for marketing the same, futures trading, even with its disadvantages of minor price fluctuations, is of distinct benefit to the producer in the price he receives."

That is the final summary of the Stamp Commission report which covers every phase of futures trading in grain and its effect on the price received by the grower, and is in addition to former exhaustive reports which have shown that the facilities of the Winnipeg Grain Exchange are used to market Canada's grain with the greatest possible speed and economy.

Dr. Alonzo Taylor, well-known economist with Leland Stanford University in California, in giving evidence before the Stamp Commission, concisely summed up the advantages of futures trading in these words:

"A prompt and sensitive price registration is effected. Risk in every stage from grower to household is lowered and evaded, an insurance is provided to merchants and processors through hedging. The carrying of current stocks and of carry-overs from one crop year to another is facilitated. Expensive and multifarious negotiations become unnecessary. A basis is provided for bank credit. A background is furnished to the cash market. The margin between producers' and consumers' price is narrowed. A basis is provided for forecasting in the interest of both producers and consumers."

System of Cash Grain Trading

All contracts made on the Winnipeg grain futures market call for the delivery of the grain, free of all charges in store a regularly licensed terminal elevator at Fort William or Port Arthur. The grades deliverable on the contract and the discounts at which One Northern is deliverable at the contract price and Two Northern, Three Northern and Four Northern may also be delivered in fulfilment of the contract at certain specified discounts. It is the seller's privilege to tender in completion of his contract any of the contract grades on any trading day of the entire contract month.

All grain prices and sales of grain are based on the price of the current future contract or the next approaching future contract; according to the demand and the position of the grain, the price may be at a discount or a premium relative to the future price.

Grain in store a regular elevator in Fort William or Port Arthur for which warehouse receipts are held and are available for immediate delivery is known as "spot" grain and is sold for payment only by marked cheque upon presentation of the warehouse receipt. The value of spot wheat can never fall under the futures delivery prices more than the cost of storage and interest to carry the wheat to first day of the delivery month. On the other hand, a strong demand for spot wheat can raise the value of spot wheat to a premium over the futures price.

All grain transactions are based on the price of the futures market and practically without exception all buyers and sellers of cash grain exchange an equal quantity of futures. The complementary futures thus exchanged are known as a "hedge" and it is by the use of the futures market in this way that insurance is obtained against the risk of price fluctuation and by this means grain is carried from the producer to the consumer on an extremely narrow margin.

The futures market provides a broad and readily available source of supply for the importer and the miller in the buying of their requirements, while on the other hand it makes available to the producer, wherever he may be located, world prices for his grain and the means whereby he can sell at any time he chooses at these values for spot cash.

The use of the futures market may be illustrated by reference to the case of a country elevator company on the one hand. The elevator company buys, say, 5,000 bushels of wheat for cash from a farmer. It seeks no speculative profit from the grain. From the day of the purchase until the day of resale the elevator company earns only legitimate and moderate handling charges. Should the price of the grain drop before the re-sale, the elevator company would suffer a loss unless it carried the insurance provided by hedging. So when it buys from the farmer, a like number of bushels are sold on the grain exchange for future delivery. If the price of wheat declines, the elevator company gains on the futures contract what it loses on the grain purchased from the farmer, and vice versa. One offsets the other and the elevator company has neither gained nor lost through fluctuations in the market. When the grain bought from the farmer is actually delivered to a purchaser, the future contract representing the hedge is repurchased. In protecting itself in this manner the elevator company is able to pay a higher price to the producer for his grain than if it were obliged to risk without insurance the continuous shifts in grain prices.

On the other hand, take the case of a miller or importer who has sold flour or wheat for delivery at some future date. He immediately places a buying order in the futures market, buying the month most suitable to his requirements. Later on, when he requires to obtain the grain for actual shipment, he exchanges the future contract which he has purchased for actual spot grain and thus obtains the grain to fill his sale at approximately the price at which he purchased the future contract irrespective of how much the market may have fluctuated in the meantime. By means of this protection, he is able to sell his wheat or his flour to the ultimate consumer on a much narrower margin than would be possible if he had not this means of insuring himself against the price fluctuation.

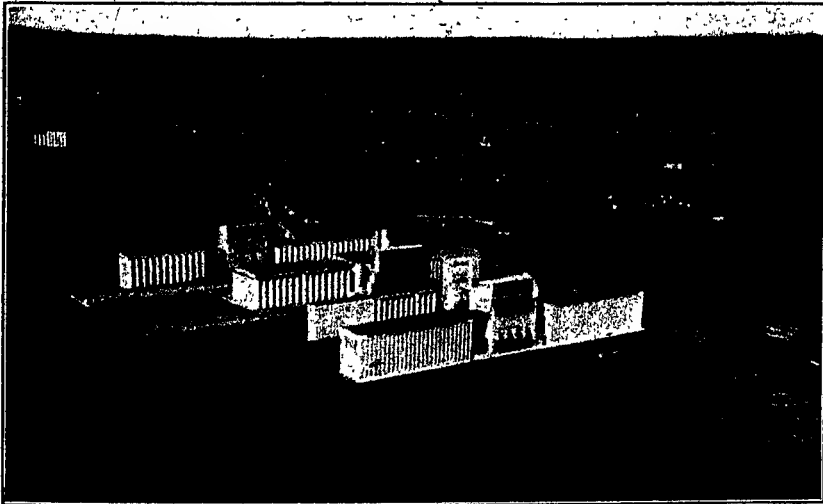
Other Trading Activities

To the uninitiated, trading in grain is replete with mysterious terms which, however, describe simple operations.

The pit trader, for instance, may operate for his own account or as a broker for others, trading as his judgment dictates when he is operating for himself. He supplies buying or selling opportunities and through him an order from a broker's customer is assured of quick execution.

Sometimes there is a "spread" between prices of similar grains in different markets, wider than justified by usual factors. A "spreader" will buy in the lower market and sell in the higher, expecting the two markets to come more nearly into line, thereby giving him a profit on the transactions. Differences in prices of different grains or grades within the same market, or between different futures of the same grain are also taken advantage of by the spreader and the effect of his operations is to bring prices into their proper economic relationship with each other. He helps stabilize prices.

The foregoing has attempted to explain what the Grain Exchange is and what it does, and to reduce to non-technical terms as far as possible the highly specialized and keenly competitive system of trading in cash grain and futures. But the operations of the grain trade by no means stop there. There are other divisions of the trade which play essential roles in the business of moving Canada's grain to market.



TERMINAL ELEVATORS AT PORT ARTHUR

The Clearing House

The large number of transactions occurring daily on the Grain Exchange must be brought into balance at the close of each business day. This is the function of the Winnipeg Grain and Produce Exchange Clearing Association, commonly called the Clearing House. It is an organization separate from the Grain



Exchange but is used by members of the Exchange to balance their futures trades daily.

It is to the grain trade what the bank clearing house is to the banks, but where the bank clearing house clears cheques representing dollars, the grain organization clears trades representing bushels of grain. At the close of each business day, members give to the Clearing House a detailed statement showing each transaction made that day, what was sold or purchased, and to whom or from whom.

From the moment of acceptance by the Clearing House of these transactions, the identity of the original buyer or seller is lost and the Clearing House assumes the position of the buyer to the seller and seller to the buyer.

The net position of each member is determined and settlement is made by a single cheque. If the member is on the credit side, a cheque is issued to him by the Clearing House; if on the debit, he issues a cheque to the Clearing House. Thus the Clearing Association assures the grain trade an efficient, economical and safe method of keeping all futures contracts cleared to the market daily and it guarantees safe-holding and proper delivery in all transactions in futures trades.

Sampling the Grain

One of the most important services in the handling of grain from the producer to the consumer is the sampling of the millions of bushels that flow eastward and westward from the grain fields of the prairies.

Through a system built up by the Government Inspection Department, under the supervision of the Board of Grain Commissioners, the Canadian farmer is assured of an inspection service that for thoroughness and efficiency is not surpassed in any country.

A car of grain arrives at an inspection point; there it gives up part of its history, its number, kind of grain it holds, point of origin, and destination. A sampling crew then begins its work. The car-opener breaks the seals and a record is taken of them. Inside the car a large canvas sheet is spread upon the grain to hold the samples as they are taken.

The sampler then drives a 72-inch brass probe into the grain to the bottom of the car. The probe has an outer sheath which,

when the handle is turned, opens eleven compartments, thus taking eleven samples through the depth of the grain. This process is usually repeated at seven different places in the car so that a complete, representative sample of the grain is obtained.

When the entire train has been sampled, the separate samples are collected in bags and taken to the government grain yard office where the car numbers and kind of grain are checked from the train list to prevent any error. Inspection sheets are also entered up here and the samples are sent to the Central Inspection Office for grading.

The size of the job done by the inspection department may be appreciated when it is realized that in the fall rush, trains of grain leave Winnipeg about every twenty minutes for the Head of the Lakes, and that as many as three thousand cars have been sampled every twenty-four hours for a considerable period in the Winnipeg yards.

How Grain is Graded

There are many kinds of grain and several varieties of each kind. Each has uses that are peculiar to itself. When wheat, for instance, is thought of it is usually in bulk; but it must not be forgotten that the bulk is made up of individual berries and the value of the bulk depends upon the quality of each berry and its freedom from foreign matter.

The processor of grain, such as the miller, must have some standard of quality upon which to base his purchase. Behind this standard must be certificates or warehouse receipts upon which he can rely. This assurance of reliable standards is given by the system of grading as practised in this country.

The Inspection Department's first step after receiving the samples of grain, is weighing to ascertain the test weight per measured bushel. Then dockage is determined by weighing 500 grams (approximately one pound) of grain, sieving it and weighing the refuse or dockage which has been screened through the official standard sieves. The cleaned grain is then graded, the samples are checked and then passed upon by the supervisor, thus providing a double check.

When wheat is graded, it will fall into one of the five main classes:

- (1) The statutory grades, Nos. 1 hard, Nos. 1, 2 and 3 Northern;
- (2) Wheat affected by climatic conditions which vary from year to year; these go into "commercial grades," set every year by a Standards Board, and are called Nos. 4, 5 and 6 Northern, and feed. Sometimes, due to peculiar conditions, additional grades are set, called Nos. 4, 5 and 6 special;
- (3) Musty, dirty, smutty or sprouted wheat, or wheat that contains a large admixture of other kinds of grain, or seeds, or that for any cause is not fit to be classed under one of the recognized grades, is called "Rejected";
- (5) All good wheat that is excessively moist and therefore unfit for warehousing, is called "No Grade."

If a shipper is dissatisfied with the grade given his car of grain he has two recourses: First, he may call for a reinspection of the unload sample, for which there is no charge; second, if the grade is not raised and he is still dissatisfied, he may have the unload sample placed before the Grain Appeal Tribunal, whose decision is final. The fee for this is \$3.00. If the grade is raised by the Tribunal, the fee is returned; if the inspector's grade is sustained, the fee is forfeited.

In Instant Touch with World's Markets

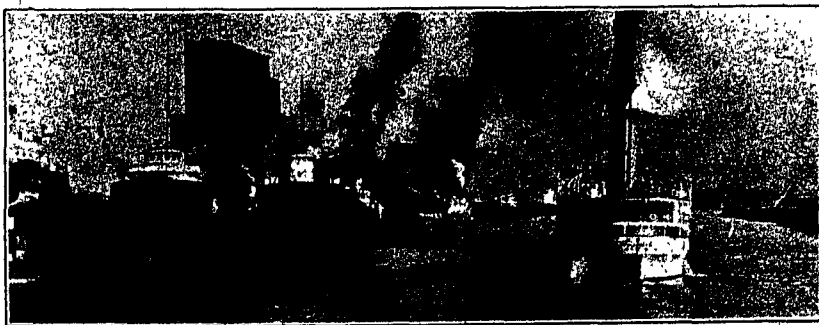
GRAIN trading on an international scale requires rapid and accurate communication between the world's trading centres. The Winnipeg Grain Exchange has such a service at its instant demand. At one end of the large trading room is a battery of telegraph instruments, and at the touch of a key a trader in Winnipeg may be put in instant touch with a trader ten miles or ten thousand miles away.

Direct wire circuits link the Winnipeg Exchange with all of the main exchanges on this continent and fast cable service assures quick contact with any part of the globe where the grain business is carried on.

To conduct efficiently the world's grain business, each market must have a continuous picture of operations in all other markets.

Prices at Liverpool must be known in Winnipeg as fast as man's ingenuity can transmit them; Liverpool must know the condition of the Winnipeg market; Chicago and New York must not be ignorant of the movements at Winnipeg.

Cable messages from Liverpool have been delivered to a trader on the floor of the Winnipeg Exchange two minutes from the time they have been filed. Answers have been delivered in Liverpool in about seven minutes. An almost unbelievable record for speed in transmission has been made in this connection. A verbal order flashed to an operator from the Winnipeg pit was wired to Chicago, delivered in the pit there, the answer flashed back to the operator by the pit trader, wired to the Winnipeg Exchange and delivered to the broker, the whole transaction completed in fifteen seconds. Such is the efficiency of the system that the operators can handle eight messages a minute, four each way, when the market is active.



FORT WILLIAM WATER FRONT

The same speed is usual on the New York wires and orders and reports are flashed over the ocean cables from New York to Continental points in much the same way as on land wires.

Vessel agents and others interested in the transportation of grain are kept in close touch with shipping developments through direct wires between Winnipeg and Chicago, Toronto, Montreal, New York and the Head of the Lakes.

Wherever telegraph wires stretch, persons interested in the grain business can be in constant touch with the grain markets of the world. An elevator operator or a broker in a small western town, for instance, has access to what is known as the "CND" service. For a certain monthly charge, this service telegraphs

quotations from the Winnipeg Exchange at stated times during the day.

The larger cities are served by the "ticker" service. These tickers, installed by the telegraph companies in exchanges and brokers' offices across Canada, are capable of recording 500 characters, or approximately 100 words, a minute. The ticker operators flash each quotation as it appears on the board at the Winnipeg Exchange trading room, so that the quotation appears on the ticker tape in Montreal or Victoria about ten seconds after the trade is made in Winnipeg.

Through the medium of this world-wide wire and cable system the Grain Exchange collects and makes available to its members such information as is needed in order that the business may be transacted intelligently and efficiently. For instance, it collects statistics showing the movement of grain, the receipts at points of special importance, the visible supply of grain, inspections, crop conditions and estimates, the weather. It arranges with other Grain Exchanges for interchange of prices. It posts the quotations on other markets as they are received over the wires moment by moment, and flashes Winnipeg prices continuously to other exchanges.

Such a speedy interchange of essential market information plays a major role in the efficient disposition of the country's grain crops.

Down the Great Lakes to the Seven Seas

LATE in 1883, a small steamer nosed her way into the harbor at Fort William, and history was made. The steamer was the Erin and she took out the first cargo of grain from the Lakehead to Eastern Canada. Thus grain shipping by the lake route was born.

The Erin's cargo was a few thousand bushels. Today great grain carriers of the lakes take as much as half a million bushels. Most of the Erin's cargo was transferred by freight cars from the grain sheds to the wharf and laboriously loaded aboard the steamer in wheelbarrows. The balance was taken on in bags. Today, the grain boats tie up at the elevators, great steel spouts are lowered into the holds, and loading is completed in a few hours.

The first elevator, forerunner of the mighty steel and concrete grain houses of today, was started in 1883 and was com-

pleted in time for the "rush" of the 1884 crop. Its capacity was 350,000 bushels and there were those who laughed at its builders for their ambitious plans. Grain storage capacity at the Twin Ports today is approximately 93,000,000 bushels. The water front is an imposing sight with its towering structures, monuments to the amazing progress made by Western Canada's grain growing industry in the last half century. Lakehead terminal elevators now number 34.

Millions of dollars have been spent in dredging and other work to give the Twin Cities of Port Arthur and Fort William probably the finest inland port in the world. Thunder Bay itself is a magnificent body of water, 35 miles long by 16 wide, the "spout" through which flow the huge grain crops of Western Canada to meet the demands of half the world.

The total dredged and sheltered harbor frontage available at Fort William is more than 20 miles in length with about seven miles of wharfs. Port Arthur has about five miles of shore line from which about four miles of landing slips have been built, and there is an additional ten miles or so available for further wharfage.

From the opening of navigation, usually late in April or early in May, until the ice forms again in December, the huge grain boats move continuously up and down the Great Lakes. The size of the fleet varies, of course, with conditions from year to year, but in a normal season 60 of the mighty freighters are busy carrying Canada's grain to the east.

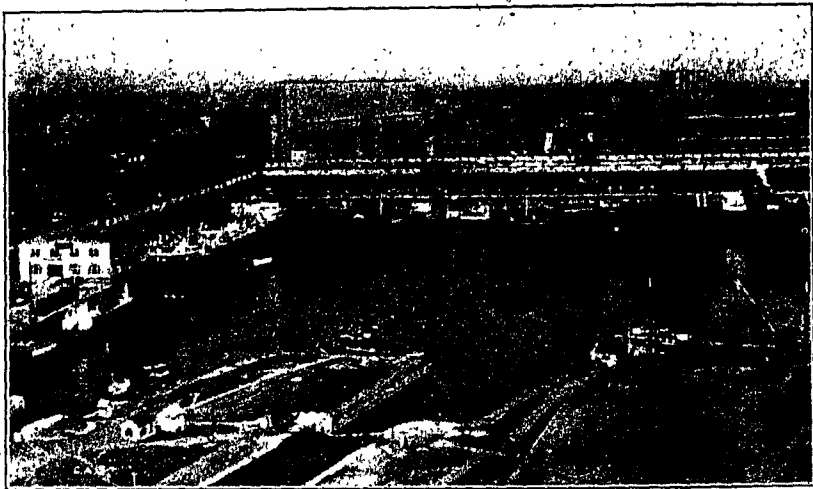
Lake Shippers' Clearance Association

There is an organization that co-ordinates all the efforts of the grain handling interests who use the Twin Ports. This is the Lake Shippers' Clearance Association, and it is a very important factor in the smooth working of Canada's vast grain moving machinery.

The Association is a clearing-house for grain. When a buyer purchases, say, 100,000 bushels of wheat, he does not buy any particular 100,000 bushels stored in a single elevator. He may have delivered to him warehouse receipts of every elevator at the Lakehead. If it were not for the Lake Shippers' Association he would be required to send his boat to all these elevators to pick up his full cargo. The Association makes it possible for the

shipper, in effect, to trade his warehouse receipts for others so that his boat can load its entire cargo at one elevator.

The Association is a co-operative, mutual institution, non-incorporated, organized by the grain shippers. It operates as a clearing house for grain documents, somewhat on the method of a bank clearing house. It combines all the documents of the different shippers to give the vessels the maximum despatch in loading. It also increases the movement by rail in the same way, by combining the shipments so that cars can be distributed to the best advantage to the terminals for loading.



MONTREAL HARBOR

The Association has been of distinct value to the banks that finance the crop each year by acting as an independent, responsible trustee for the holding of grain documents upon which the banks advance money. It has been of value also to the large shippers of grain, the millers, the railways. The Association is not a trading organization; it does not buy or sell grain but is merely a service institution for all engaged in the grain business. Its part in the smooth, economic despatch of Canada's crops into the consumptive channels of the world cannot be over-estimated.

It takes delivery of warehouse receipts in its office in Winnipeg, records them in books under their several grades and elevators, and promptly wires the necessary particulars to its Fort William office and to the several elevators concerned.

It receives the shipping order from the shipper, and where any bank is interested sees that its interests are fully protected, loads the grain out according to the terms of the loading order; makes out the rail or vessel bills of lading in split quantities as required; obtains the government weight and inspection certificates to correspond with the bills of lading; makes out all customs papers, including export entries and consular invoices where required, and delivers all the documents covering the shipment, complete to the shipper or the bank as the case might be.

All that is a tall order for any organization, but the services of the Lake Shippers do not end there. The Association adjusts and pays all the elevator and other charges against the shipment and delivers to the shipper the detailed manifest showing all charges against the shipment. It also maintains a private telegraph wire between its Winnipeg and Fort William offices so that all transactions in connection with shipments, such as changing loading orders, destination, billing instructions and so forth can be carried out with the maximum speed and efficiency.

The results achieved by the Lake Shippers' Clearance Association are sufficient proof of its value to the grain trade generally, the transportation companies, the banks, and indirectly the producers. Those who use it, and those who know of its services are unanimous in saying that without the Association the business of moving the tremendous yearly volume of grain from the Head of the Lakes swiftly and economically would be impossible.

Since 1922, the Head of the Lakes has had the largest elevator capacity in the world, with the most modern equipment for the rapid handling, cleaning, drying and shipping of grain, and this, co-ordinated into a smoothly operating unit by the service of the Lake Shippers' Clearance Association, has put Canada in a pre-eminent position in the grain markets of the world.

Trans-shipment to Ocean Vessels

When the grain leaves the Lakehead terminal elevators it is ready for the markets of the world, the "finished product" whose high quality is one of Canada's greatest advertisements abroad. In 1932 Canadian wheat or flour found its way to seventy-seven countries to spread the fame of the western plains as the source of the world's finest wheat.

And to speed the flow of prairie grain to these far lands, Canada has some of the finest ocean ports in the world. They are second to none in the efficiency of their equipment to handle the annual shipments which reach them from Fort William and Port Arthur via the Bay Ports.

On the Atlantic Coast are the Ports of Montreal, Quebec City, Sorel, Saint John and Halifax and on the Pacific, Vancouver, Victoria, New Westminster and Prince Rupert, while Port Churchill, on the Hudson's Bay, gives the prairies direct access to the North Atlantic.

To these ocean shipping points Canada's grain flows eastward and westward, and to these ports come vessels flying the flags of most of the world's maritime nations. Great liners and plodding ocean tramps, even a few of the vanishing "wind-jammers," all manner of deep-sea craft open their holds to receive Canadian grain to carry across the Seven Seas. A good portion of this country's grain and flour also finds its way abroad via United States ports.

The St. Lawrence Harbor

The harbor of Montreal is a splendid example of modern sea-port organization. A thousand miles from the sea, it brings the ships of the world into the very heart of a continent. On a strip of land some sixteen miles long, there is a compact, highly efficient organization for the receiving, storing and despatch of freight of all kinds. It has berthing capacity for well over a hundred ships to accommodate the nearly two thousand ocean vessels which call at this port annually. From the time the ice is out of the Great Lakes until freeze-up, the lake grain carriers come in a steady stream out of the west to discharge their cargoes into the elevators at Montreal.

There are four grain elevators at Montreal with a capacity of 15,162,00 bushels and through this great port goes a large volume of grain annually. Exports of grain from Montreal have exceeded 200,000,000 in one season. This was the case in 1928.

The Port of Quebec City, steeped though it is in the romantic history of this country, has kept abreast of the times in the matter of port development. Open all year, the port of Quebec serves a steady stream of ocean vessels and plays an important part in the shipping of Canadian grain abroad. It has one grain

elevator with a total capacity of 4,000,000 bushels and a loading capacity of 90,000 bushels per hour.

Sorel, Quebec, is comparatively a newcomer to the grain shipping ports of Canada but has developed an efficient organization for the receiving and shipping of grain. On the banks of the St. Lawrence, about 50 miles down the river from Montreal, Sorel's grain handling equipment is of the most modern type. It has one elevator with a capacity of 2,000,000 bushels.

The Maritime Provinces Ports of Halifax and Saint John also boast up-to-date equipment for the handling of grain and these two ports have in recent years made strong bids for a substantial



A LAKE GRAIN CARRIER

share of this country's export grain traffic. Halifax and Saint John are among the world's finest harbors. Saint John has two elevators with a total capacity of 1,500,000 bushels while Halifax has one elevator with a capacity of 2,200,000 bushels.

The latest addition to the seaports of the Dominion is the harbor at Churchill on Hudson Bay in Manitoba, which gives the Prairie Provinces direct access to the sea. The port is equipped with a terminal or transfer elevator of 2,500,000 bushels, through which grain shipments have already passed on their way to European consumers.

Canada's principal gateway on the Pacific Coast is Vancouver and this port is rapidly becoming one of the leading grain export ports. The harbor is large and land-locked and has been a major factor in the amazing growth of Vancouver in the last quarter century.

Grain from a large section of the Canadian west flows through the Rockies to Vancouver for export to the Orient across the broad Pacific and to the United Kingdom and Continental Europe through the Panama Canal. Vancouver is well equipped with grain handling facilities with its nine elevators totalling 18,270,000 bushels capacity.

New Westminster, Victoria and Prince Rupert also play a part in the despatching of Canadian grain abroad. They each have one elevator, the three having a total capacity of 2,958,000 bushels. Although the volume of grain handled at these points is small compared to that of Vancouver, nevertheless, they hold place in the system of ocean ports which enable Canada, with speed and economy, to send her grain to lands far and near.

Wheat is harvested during every month of the year in some part of the world. The following shows the period of the harvest in the many wheat-growing countries:-

World's Wheat Harvests

January and March—East India and Upper Egypt.

April—Lower Egypt, Syria, Cyprus, Persia, Asia Minor, India, Mexico and Cuba.

May—Algeria, Central Asia, China, Japan, Morocco, Texas and Florida.

June—Turkey, Greece, Italy, Spain, Portugal, South of France, California, Louisiana, Mississippi, Alabama, Georgia, Carolinas, Tennessee, Virginia, Kentucky, Kansas, Arkansas, Utah and Missouri.

July—Roumania, Bulgaria, Austro-Hungary, South of Russia, Germany, Switzerland, France, South of England, Oregon, Nebraska, Minnesota, Wisconsin, Colorado, Washington, Iowa, Illinois, Indiana, Michigan, Ohio, New York, New England and Eastern Canada.

August—Belgium, Holland, Great Britain, Denmark, Ireland, Colombia, North and South Dakota, Western Canada.

September and October—Scotland, Sweden, Norway and North of Russia.

November—Peru, South Africa and Argentina.

December—Australia, Burma and Argentina.